



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/151,555 09/11/98 HAZRA

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EXAMINER

BEHPOUR, G

ART UNIT

PAPER NUMBER

2724

DATE MAILED: 08/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/151,555

Applicant(s)

HAZRA ET AL.

Examiner

Gholam A. Behpour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
- ☐ received.
 - ☐ received in Application No. (Series Code / Serial Number) ____.
 - ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent

Claims 1-6 and 11-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Murayama et al (U.S. 5757972).

Regarding claims 1 and 6, Murayama et al disclose a video processing system comprising:

a video coder (col. 2, line 68) the video coder including the capability to generate an edge detection map along a predetermined direction for an uncoded frame that is to be coded (col. 10, lines 30-33).

Regarding claim 2, Murayama et al disclose the video processing system wherein the video coder includes the capability to also compress the edge detection map (col. 10, lines 55-59).

Regarding claim 3, Murayama et al disclose the video processing system wherein the predetermined direction comprises one of the vertical and horizontal direction (col. 10, line 33).

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Regarding claim 4, Murayama et al disclose the video processing system that further comprising a video decoder (col. 12, lines 26-27).

Regarding claim 5, Murayama et al disclose the video processing system wherein the video decoder includes an edge sensitive post-filter, the edge-sensitive post-filter including the capability to enhance a decoded video frame based, at least in part, on a decoded edge detection map associated with the decoded frame (col. 13, lines 45-51).

Regarding claim 11, arguments analogous to those presented for claim 1 is applicable to claim 11.

Regarding claim 12 arguments analogous to those presented for claim 3 is applicable to claim 12.

Regarding claim 13 arguments analogous to those presented for claims 1 and 3 is applicable to claim 12.

Regarding claims 14 and 16, arguments analogous to those presented for claim 4 is applicable to claims 14 and 16.

Regarding claims 15 and 17, arguments analogous to those presented for claim 5 is applicable to claims 15 and 17.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama et al as applied to claims 1, 6 and 11 above, and further in view of Yuan et al (U.S. 5821986).

Regarding claim 7, Murayama et al do not disclose a video processing system wherein the video processing system includes the capability to code the edge detection map for transmission via a communications channel along with an associated coded video frame, Yuan et al do disclose such a system (col.2, lines 62-64).

Regarding claims 8 and 10, Murayama et al do not disclose a video processing system wherein the video processing system includes the capability to code the edge detection map for transmission via a communications channel (col. 2, lines 62-64) separately from an associated coded video frame (col. 7, lines 40-69).

Regarding claim 9, Murayama et al disclose a video processing system wherein the video processing system includes the capability to code the edge detection map for storage along with an associated coded video frame (col. 7, line 24).

Regarding claim 19, arguments analogous to those presented for claim 7 is applicable to claim 19.

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It would have been obvious to a person of ordinary skill in the art at time the invention was made to modify Murayama et al's system with a communication channel device of Yuan et al in order to encode an image at one terminal for transmission onto the network whereby the image can be decoded.

Claims 18 and 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama et al as applied to claims 1, 6 and 11 above, and further in view of Rosenberg et al (U.S. 5832115).

Regarding claim 20, Murayama et al do not explicitly disclose an article comprising: a storage medium having stored thereon instructions capable of being executed by a system that when executed result in: producing an edge detection map along a predetermined direction from the video frame prior to coding; coding the edge detection map and the video frame, Rosenberg et al disclose such a system (col. 10, lines 16-39)

Regarding claim 21, arguments analogous to those presented for claim 3 are applicable to claim 21.

Regarding claim 22, arguments analogous to those presented for claims 1 and 3 are applicable to claim 22.

Regarding claims 23-25 and 27, arguments analogous to those presented for claim 5 are applicable to claims 23-25 and 27.

Regarding claims 18 and 28, arguments analogous to those presented for claim 20 are applicable to claim 18 and 28.

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Regarding claim 29, arguments analogous to those presented for claim 7 are applicable to claim 29.

It would have been obvious to a person of ordinary skill in the art at time the invention was made to modify Murayama et al's system with a storage medium device of Rosenbeg et al in order to store computer instructions for high speed image compression well suited for video-phone and video-conferencing equipments.

Other prior art cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5984514 to Greene et al is cited for Method and apparatus for using minimal and optimal amount of sram delay line storage in the calculation of an x y separable mallat wavelet transform.

U. S. Patent 5694487 to Lee et al is cited for Method and apparatus for determining feature point.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051 (for *formal* communications intended for entry)

Art Unit:

(703) 306-5406 (for *informal* or *draft* communications, please label "PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication should be directed to Gholam A Behpour whose telephone number is (703)305-3969. The examiner can normally be reached on M-F (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703)308-7452. The fax number for the organization where this application or proceeding is assigned are (703)306-5406 for draft communication and (703)308-9051 for formal communications.

Gholam A. Behpour
Examiner
Art Unit 2724

G.A.B
August 11 2000


SCOTT ROGERS
PRIMARY EXAMINER